## Remarks

The Examiner rejected all of the claims under 35 U.S.C. §101. The independent claims have been amended. The claims as amended clearly meet the requirements of 35 U.S.C. §101.

The applicant continues to believe that the claims prior to this amendment met the requirements of section 101. However, in order to advance examination, the applicant has added the step of using the transmittances in the analysis of imaging sensors with atmospheric imaging paths. See the Abstract and paragraphs [0013], [0014] and [0122] for support.

The applicant also directs the examiner to two patents with claims also directed at atmospheric modeling. See, e.g., claim 1 of US Patent 5,884,226 and claim 1 of US Patent 6,484,099. Neither of these claims would meet the section 101-related requirement set out by the examiner herein that the claims "reflect a substantial, useful event to a credible activity" or that the claims have a "substantial application" (both requirements found on page 3 of the office action).

Despite this, the claims currently directly include a useful, substantial event that is concrete; that is, the use of the calculated transmittances in the analysis of imaging sensors.

The applicants appreciate the conclusion that there are no outstanding 102 or 103 issues.

The claims are thus allowable. If the examiner for any reason finds that they are not, the undersigned would appreciate a telephone conference with the examiner.

The applicant is also not sure of the proper shortened time frame for filing this response, as it is listed as 6 months on the summary page, but 3 months on p. 5 of the office action.

Further, the examiner has made the office action final on the first action, but cited in the conclusion on p. 5 MPEP section 706.07(a), which relates to final rejections on the second action. In any case, this response is filed within the first month.

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If for any reason this Response is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the undersigned in Westborough, Massachusetts, (508) 898-1501.

Respectfully submitted,

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